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BEFORE THE SUBCOMMITTEE ON HISTORIC PRESERVATION AND COINAGE
OF THE HOUSE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS
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Thank you, Mr. Chairman, for this opportunity to appear before your Subcommittee to discuss the material proposed for the new smaller dollar.

Since 1964, when a decision was made to remove silver from the Nation's circulating coinage, the Treasury Department has been performing on-going studies of materials for both high and low value coinage. These studies have been conducted in the Bureau of the Mint's facilities as well as the laboratories of several highly respected private industrial research organizations, such as Bell Telephone Laboratories, Battelle Memorial Institute, and the Research Triangle Institute. The most recent Treasury Department publication on the subject of coinage materials and alloys was issued in August, 1976 and is entitled, "A New Smaller Dollar Coin - Technical Considerations". With the Chairman's permission, I would like the text of this report inserted in the record.

The most important criteria which were used in evaluating candidate materials for the new dollar coin were: public acceptability, including use in vending machines; slugging and counterfeiting potential; compatibility with existing Mint equipment; and cost and availability of materials.

The candidate materials which were extensively evaluated against these criteria included a series of cupro-nickel alloys with nickel content varying between 7 percent and 25 percent; several clad or "sandwich" materials including cupro-nickel clad on copper, cupro-nickel clad on nickel, nickel clad on cupro-nickel, brass clad on copper and nickel-aluminum-bronze clad on copper; powdered titanium; and a series of copper-nickel-zinc alloys commonly referred to as "German silver". In addition, the possible usage of a silver-containing alloy or laminate was investigated.

Of all the materials tested, only the one proposed by the Administration, a laminate of 75 percent copper-25 percent nickel on a core of pure copper, satisfied the four criteria listed above. Most of the alloys which were investigated satisfied only one or two of the evaluation criteria. One material, titanium, did not satisfy any of the evaluation criteria.

Cupro-nickel clad on copper has many advantages including superior surface wear and appearance, and relative low cost to produce. Overall, it contains approximately 90 percent copper and is economically fabricated into coinage strip for high relief coins. Scrap material which is generated in the strip fabrication and blanking operations is readily recyclable into coinage strip. The unique electrical properties and density of this laminate make it very difficult to counterfeit and slug.

Except for the thickness of the cupro-nickel cladding for the new smaller dollar coin, this laminate is the same material as is now being used in all of our coin denominations other than the five-cent and one-cent coins. It has achieved widespread public acceptance, has been endorsed by the United States vending industry and has been adopted for coinage by two foreign governments.

This, Mr. Chairman, completes my prepared remarks. I am most interested in the testimony which will be offered this morning and will be pleased to respond to any questions which you or other members of the Committee may have.